

**Amendments to the Specification:**

**[0017]** A further way of improving the performance of the joints, principally when the pipe works in compression, consists in reducing the gap between the acute side of the male and female threads, as disclosed in patent document WO 0066928, which suggests a value for said thread gap of ~~0,002~~ 0.002 ins. (corresponding to ~~0,05~~ 0.05 mm).

**[0018]** As a result of the above, considering, for example, a threaded joint with 6 TPI (threads per inch), with a height of each thread of 1 mm, the empty space above the male thread and the female thread, according to the teaching of US patent No. US-A-4830411, must be at least ~~0,26~~ 0.26 mm in order to prevent problems of pressure of the lubricant. Thus the above total empty space represents a difference of diameter of ~~0,52~~ 0.52 mm, between the outside of the male tube and the inside of the female tube.

**[0020]** Consequently, if we consider the quantities OD and ID of the tubes to be constant, said difference of ~~0,52~~ 0.52 mm between the outside of the pin and the inside of the box can reduce the performance of the joint.

**[0028]** A correct sizing of the optimal geometrical and dimensional characteristics of the thread and of the joint as a whole is defined by the formulae of Claim 1  $NVV [cm^3] \leq 4 \times OD [inch]$ , where NVV is a nominal empty volume and OD is the nominal outer diameter of a tube expressed in inches.

[0040] If we consider a thread with 4 TPI and a tooth height of 1,5 1.5 mm, the area filled by a coating of 30  $\mu\text{m}$  of thickness is approximately 0,3 0.3 mm<sup>2</sup>. Consequently, in order to prevent any unexpected contact between the sides of the threads, said maximum dimension of said area is fixed at 0.4 mm<sup>2</sup>.

[0054] The values of said parameters are represented in Table 1.

Nom. Diameter. [ins]	Empty area [mm <sup>2</sup> ]	Empty volume [cm <sup>3</sup> ]	$\frac{NVV}{OD}$	$\frac{NVV}{OD \times \sqrt{Wt}}$
7 3/4	<u>59,9</u> <u>59.9</u>	37	<u>4,8</u> <u>4.8</u>	<u>1,24</u> <u>1.24</u>
10 3/4	<u>57,4</u> <u>57.4</u>	<u>49,2</u> <u>49.2</u>	<u>4,58</u> <u>4.58</u>	<u>1,3</u> <u>1.3</u>

[0057] In said joint the two stages assume a value of tapering of 8,5% 8,5% on the diameter, with a thread profile, as in Figure 6, with an angle  $\alpha$  of  $4^\circ$  and an angle  $\beta$  of  $20^\circ$ . According to said advantageous embodiment, the aforementioned parameters assume the following values:

Nom. Diameter [Ins]	Empty area [mm <sup>2</sup> ]	g <sup>T</sup> [mm <sup>2</sup> ]	Empty volume [cm <sup>3</sup> ]	$\frac{NVV}{OD}$	$\frac{NVV}{OD \times \sqrt{Wt}}$
7 $\frac{3}{4}$	<u>43,1</u> <u>43,1</u>	<u>0,28</u> <u>0,28</u>	<u>26,6</u> <u>26,6</u>	<u>3,43</u> <u>3,43</u>	<u>0,88</u> <u>0,88</u>
10 $\frac{3}{4}$	<u>38,4</u> <u>38,4</u>	<u>0,28</u> <u>0,28</u>	33	3	<u>0,83</u> <u>0,83</u>

[0058] Another preferred embodiment of the joint according to the invention is represented in FIG. 7. Said construction relates to a made up threaded joint, with single-stage tapered thread. It comprises a shoulder for abutment, set in a position corresponding to the nose of the male tube, a metal-to-metal seal and a ring-seal gasket located in the threaded area. The tapering of the thread is 6,25% 6,25% in the case of 5 TPI and 8,5% 8,5% in the case of 4 TPI. The profile of the thread is a modified saw-toothed one of the API type with an angle of the load side of  $3^\circ$  and an angle of the lead-in side of  $25^\circ$ .